

**30 APRIL 2001**



***Communications and Information***

**WEAPONS SYSTEM VIDEO PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: HQ USAF/SCMOM (Mr. Ray Dabney)  
Supersedes AFI 33-132, 1 December 1998.

Certified by: HQ USAF/SCXX (Col Terry Pricer)  
Pages: 16  
Distribution: F

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This Air Force Instruction (AFI) implements Department of Defense Directive (DoDD) 5040.4, *Joint Combat Camera (COMCAM) Program*, September 30, 1996, and Air Force Policy Directive (AFPD) 33-1, *Command, Control, Communications, and Computer (C4) Systems*. It also complements AFI 14-105, *Unit Intelligence Mission and Responsibilities*. It defines the Air Force Weapon Systems Video (WSV) program (formerly known as Armament Delivery Recording), whose primary purpose is to provide the combat air forces, unified commanders, and the national command authorities (NCA) with a visual record of aircraft weapons delivery, targeting, and accuracy. This instruction applies to commands whose flying units have operational capability taskings for combat missions and whose aircraft generate visual imagery of weapons delivery. It also applies to supporting commands that process this imagery. For the purpose of this AFI, the Air National Guard is considered a major command (MAJCOM). This instruction does not apply to maintenance and management of onboard cockpit sensor, video camera, or recording systems, nor does it outline criteria for operational analysis of imagery. Direct questions or comments on the contents of this instruction through appropriate command channels to Headquarters United States Air Force (HQ USAF/SCMOM), 1250 Air Force Pentagon, Washington DC 20330-1250. Refer recommended changes and conflicts between this and other publications to Headquarters Air Force Communications Agency (HQ AFCA/ITPP), 203 W. Losey Street, Room 1100, Scott AFB IL 62225-5222, using AF Form 847, **Recommendation for Change of Publication**. See **Attachment 1** for a glossary of references and supporting information. Maintain and dispose of records created as a result of prescribed processes according to Air Force Manual (AFMAN) 37-139, *Records Disposition Schedule* (will convert to AFMAN 33-322, Volume 4).

**SUMMARY OF REVISIONS**

**This document is substantially revised and must be completely reviewed.**

The title of this publication changed from Armament Delivery Recording Program to Weapons System Video Program. It updates organizational changes, policies, and procedures to simplify lines of communication, ease coordination, and enhance span of control for the wing WSV support team. It incorporates

## Report Documentation Page

<b>Report Date</b> 30 Apr 2001	<b>Report Type</b> N/A	<b>Dates Covered (from... to)</b> -
<b>Title and Subtitle</b> Air Force Instruction 33-132, Communications and Information Weapons System Video Program		<b>Contract Number</b>
		<b>Grant Number</b>
		<b>Program Element Number</b>
<b>Author(s)</b>		<b>Project Number</b>
		<b>Task Number</b>
		<b>Work Unit Number</b>
<b>Performing Organization Name(s) and Address(es)</b> Secretary of the Air Force Pentagon Washington, DC 20330-1250		<b>Performing Organization Report Number</b> AFI33-132
<b>Sponsoring/Monitoring Agency Name(s) and Address(es)</b>		<b>Sponsor/Monitor's Acronym(s)</b>
		<b>Sponsor/Monitor's Report Number(s)</b>
<b>Distribution/Availability Statement</b> Approved for public release, distribution unlimited		
<b>Supplementary Notes</b>		
<b>Abstract</b>		
<b>Subject Terms</b>		
<b>Report Classification</b> unclassified	<b>Classification of this page</b> unclassified	
<b>Classification of Abstract</b> unclassified	<b>Limitation of Abstract</b> UU	
<b>Number of Pages</b> 16		

Intelligence and Public Affairs roles into the WSV Program. It also incorporates current Air Force doctrine on the roles of the Aerospace Expeditionary Force (AEF), the Commander Air Force Forces (COMAFFOR), and the Joint Force Air Component Commander (JFACC), and how WSV products are used and provided to air operations centers (AOC) supporting them.

**1. The Weapons System Video Program .** This instruction provides visual information/combat camera (VI/COMCAM) policies and procedures necessary to support operational, Intelligence, and Public Affairs requirements. The WSV is imagery recorded by video camera systems on board aircraft that shows the delivery and impact of air-to-ground ordnance or results of air-to-air engagements.

**2. Purpose .** The primary purpose of the VI/COMCAM WSV Program is to provide combat air forces, unified commanders, and the national command authority with a visual record of aircraft weapons delivery, targeting, and accuracy. The WSV program makes selected WSV imagery electronically available to higher headquarters, including the Joint Force Commander (JFC), the JFACC, the COMAFFOR, the unified combatant command headquarters, the Pentagon, and others needing WSV for battle damage/impact assessment and/or for public release. The WSV program's secondary purpose is to establish accountability and procedures to ensure significant WSV imagery is properly processed and disseminated for operational benefit. See [Attachment 2](#) for the WSV program process and procedures.

**3. Wartime and Contingency Operations .** During combat operations, Air Force multimedia (MM) and intelligence personnel at the unit-level provide the front line collection and initial operational analysis and dissemination of WSV.

3.1. Unit-level. The MM personnel download the WSV imagery from respective strike aircraft and receive preliminary mission analysis by the flying unit and wing intelligence personnel to determine mission effectiveness and initial restrike recommendation. They transmit the WSV imagery to the AOC/theater-level collection team.

3.2. AOC/theater-level. The WSV imagery provides an overall operational picture for air campaign planners as well as the JFC and JFACC. The WSV assists in making retargeting and apportionment decisions, and is used to analyze tactics to prevent friendly force losses. The AOC/theater commanders also use WSV imagery to support presentations to coalition and US leaders, congressional delegations, news media, and the public.

3.3. Strategic-level. The WSV imagery provides immediate documentary evidence of air component actions and can disprove enemy claims of civilian targeting and collateral damage. Imagery that arrives at the Pentagon's Joint Combat Camera Center (JCCC) is provided to the NCA, Chairman of the Joint Chiefs of Staff, military departments, combatant commands, defense agencies, public affairs offices, and coalition representatives, as appropriate.

**4. Peacetime WSV Operations .** Exercise the WSV Program at all levels. Unit training programs ensure interoperability and a seamless transition to combat operations. Periodically, wing and theater WSV teams perform exercises in order to practice and perfect collection, transmission, and management techniques at home station. COMCAM teams should similarly seek formal opportunities for exercising this capability and shall manage a stateside (in-garrison) WSV Multimedia Server connected to the SECRET Internet Protocol Router Network (SIPRNET) allowing units to "practice as they will fight."

This will require a standing Intelligence oversight agreement/memorandum of agreement coordinated through Headquarters Air Combat Command (HQ ACC IS/INC).

## 5. WSV Program Responsibilities .

5.1. HQ USAF/SCMOM. This office serves as the office of primary responsibility (OPR) for the overall management of the VI documentation/hardware component of the WSV Program. They also serve as the OPR for WSV standardization. The OPR sets and maintains files and equipment standards to ensure interoperability for the WSV Program in accordance with the Joint Technical Architecture-Air Force.

5.2. HQ USAF/XOIR. This office serves as the OPR to manage intelligence policy and guidance on WSV and its operational exploitation by the intelligence community.

5.3. Secretary of the Air Force (SAF/PA). This office serves as the OPR for Public Affairs (PA) guidance on WSV (see AFI 35-101, *Public Affairs Policies and Procedures*). The PA is the final releasing authority of WSV to the media. The JFC determines criteria for WSV release at theater-level.

5.4. Headquarters Air Mobility Command (HQ AMC). Per AFI 33-117, *Visual Information (VI) Management*, HQ AMC trains and equips COMCAM WSV teams to consolidate, edit, and process WSV imagery for the JFC, JFACC, COMAFFOR, and other customers, as approved. The COMCAM shall electronically transmit imagery within theater and to continental United States (CONUS)-based Unified Commands as well as the Pentagon's JCCC to ensure exploiting and preserving selected significant imagery for historical purposes. The COMCAM WSV teams must organize to support this requirement.

5.5. HQ ACC/SC. This office standardizes training/equipment for unit-level WSV unit type code (UTC) 6KPWS teams for all combat Air Force (CAF) MAJCOMs.

5.6. Air Component MM Functional Area Managers (FAM). The MM FAMs will, consistent with the requirements in AFI 33-117, identify AOC/theater WSV requirements and load appropriate support teams into AOC/theater Operation Plans, Concept Plans, and other planning documents.

5.7. Air Component Directors of Communications and Information. The Director ensures certification of COMCAM WSV servers to operate in a tactical environment. Communications infrastructure at the deployed site should accommodate the passage of WSV files.

5.8. Base MM Managers. Ensure personnel assigned to WSV UTC 6KPWS teams are equipped and trained to deploy with wing operations and intelligence staffs to select, digitize, edit, and transmit imagery to theater (COMCAM) WSV server. Accomplish transmission to theater collection teams via electronic means or physical shipment as prescribed by theater guidelines. Wing WSV teams must organize to support this requirement. During the test phase of the equipment, the local MM Manager is responsible for all test documentation VI products as detailed in AFI 33-117.

5.9. CAF Wing Commanders. Appoint a deployed WSV monitor to keep WSV procedures, systems, and training effective and ready for war. The WSV monitor is either an intelligence or COMCAM officer/senior noncommissioned officer (NCO) appointed at wing-level to ensure recording, processing, and elevating WSV to theater WSV collection points.

**6. WSV Program Resource Management Purpose .** To provide guidance on the personnel and equipment needed to support the wartime and peacetime WSV Program.

**7. WSV Program Personnel .** The MM, COMCAM, and Intelligence personnel work together to execute the WSV Program during peacetime or wartime situations. The MM personnel process WSVs at the unit or wing-level, while COMCAM consolidates WSV imagery at the theater-level. Intelligence personnel guide the overall analysis and processing effort at unit, wing and theater-level. The MM or COMCAM personnel do not perform analyses of WSV.

#### 7.1. Unit-Level.

7.1.1. Intelligence. In the WSV Program, intelligence personnel produce the Mission Report (MISREP) and oversee the selection of significant WSV imagery. Intelligence personnel are assigned specific WSV duties and responsibilities if MM or CAMCAM personnel are not present or during peacetime operations. Intelligence personnel are normally under the operational control of the Wing/Group senior intelligence officer (SIO).

7.1.2. Multimedia (MM). A MM technician (UTC 6KPWS) is assigned to a flying unit either as an editing specialist or both specialist and WSV monitor. Personnel deploy with host fighter wings consistent with AEF requirements. When deployed, this individual is an intelligence asset and remains under the operational control of the Wing/Group SIO. When MM personnel are present, they are responsible for producing the following:

7.1.2.1. Classified WSV Clip. The MM technician's primary purpose is to ensure capturing, digitizing, and transmitting all significant WSV to the wing and/or the AOC/theater WSV server.

7.1.2.2. Unclassified WSV Clip. Although theater-level COMCAM personnel normally perform the video titling and masking functions required to sanitize WSV imagery, MM personnel may occasionally be required to perform this function with Theater Commander approval. Intelligence personnel performing WSV processing in the absence of MM personnel will not be tasked with this function.

7.1.2.3. Compact Disc-Read Only Memory (CD-ROM) of Selected Targets. The MM personnel may, upon request of higher headquarters, produce a compilation of selected squadron or wing targets from the original videotapes in the highest resolution video format available. This supports in-depth video analysis or Munitions Effectiveness Analysis requirements. Copy this information onto a CD-ROM or other physical medium for transmittal or physical shipment to higher headquarters. COMCAM personnel may also accomplish this duty, as requested. Destroy classified CD-ROMs according to Air Force Special Security Instruction (AFSSI) 5020, *Remanence Security* (will convert to AFMAN 33-224).

7.1.3. WSV Monitor. This individual, whether intelligence or MM personnel, is responsible for managing the unit or wing-level WSV program, ensuring the wing can generate imagery and process it efficiently, arriving to higher headquarters within timelines prescribed by theater guidelines. The WSV monitor ensures the viability of the program by monitoring unit-level WSV review systems, tape supplies, and procedures.

7.2. Theater-Level. The COMCAM personnel title, edit, mask, and catalog the WSV clips and associated MISREPs collected from the unit-level for storage and distribution to higher headquarters. Users of WSV access video through an on-line search page. Commensurate with this responsibility,

COMCAM personnel integrate and manage access to the designated theater WSV server. This server is the collection point for all USAF WSV produced in the theater or area of responsibility. Other military services may contribute digital imagery as directed by the JFC. These teams are assigned to units tasked with the COMCAM theater-level UTC, 6KPWV. A theater-level COMCAM team must be tasked by appropriate theater staff (see paragraph 5.3.) and validated by United States Transportation Command personnel. Theater WSV teams typically are collocated with the JFC, JFACC, or COMAFFOR headquarters. Consistent with DoDD 5040.4, organize COMCAM personnel commensurate with the requirements of the Joint Task Force Commander.

7.2.1. General. COMCAM will, as a rule, employ its UTC tasked WSV server in the theater of operations; however, COMCAM personnel shall first consult with intelligence and communications organizations before integrating its organic server.

7.2.2. Accreditation. Because of operational security constraints, COMCAM may not introduce organic server equipment into a deployed location without a certificate to operate issued by the applicable MAJCOM. Air Component Directors of Communications and Information are the primary custodians of the COMCAM WSV server effort, and must work closely with COMCAM personnel in gathering server parameters and architecture requirements for inclusion into deployed infrastructure. Air Component Directors of Communications and Information will, in turn, seek server accreditation via the Delegated Designated Approving Authority. HQ USAF/SCMOM will initiate a Certificate of Networkiness to HQ AFCA. HQ AFCA will review the Certificate and, if signed, sends the Certificate of Networkiness to each MAJCOM. Once MAJCOMs have the Certificate of Networkiness, they can add WSV to the Baseline Architecture and accreditation documentation.

7.2.3. Security Constraints. Provide user and password protection for COMCAM servers consistent with security constraints. The theater commander determines which individuals or agencies (both within and beyond theater) are authorized access to theater imagery servers.

## 8. Equipment .

8.1. Unit Training Videotapes with Mishap. Maintain original tapes used during training missions that involve armament or aircraft mishaps.

8.2. WSV Combat Operations Videotapes. When using armament during contingency operations, retain original videotapes containing imagery of questionable delivery of ordinance, collateral damage, or unintended targets as permanent records. Do not reuse. Submit videotapes and digitized video clips for inclusion at the Defense Visual Information Center, (DVIC/OM-PA), 1363 Z Street, Bldg. 2730, March AFB CA 92518-1508.

8.3. Other WSV Videotapes. Destroy all other videotapes not containing significant WSV when no longer needed. Do not use videotapes in excess of 10 times.

8.4. Videotape Labeling. Include one of the following tape categories in the WSV Caption Sheet (see [Table A2.1.](#)): Unit Training, Unit Training with Mishap; Contingency/Predeployment with Armament Fire/Significant WSV; Combat Operations with Armament Fire/Significant WSV; Combat Operations without significant WSV; Sustainment/Postconflict with Armament Fire/Significant WSV.

8.5. Videotape Maintenance. Unit personnel responsible for daily video tape maintenance should ensure that sufficient stocks of videotape are available to initially record 30 days of combat missions at War and Mobilization Plan sortie rates.

8.6. Cataloging/Filing Videotapes. Catalog WSV videotapes containing significant armament imagery by Visual Information Record Identification Number. Store classified videotapes according to AFI 31-401, *Information Security Program Management*.

8.7. WSV Clips. Include mission numbers and call sign in the naming format. Store digital WSV clips electronically in the following naming format: DateProducerSequencenumber.mpg (e.g., YYYYMMDD\_94FS\_001.mpg).

8.8. Unit-Level WSV Clips. Maintain significant WSV imagery according to AFMAN 37-139 (will convert to AFMAN 33-322, Volume 4). The WSV clips that remain with the generating unit (not sent to the theater) remain there until after-action reports are complete. Then download the WSV clips to a secondary storage medium and ship to the DVIC.

8.9. Theater-Level WSV Clips. COMCAM maintains the WSV clips on a theater-level server. Depending on the availability of space on the theater WSV server, clips remain on the server until operation completion.

8.10. Hardware. See paragraph 5. Because of rapidly changing hardware standards, HQ USAF/SCMOM continually evaluates emerging capabilities and provides the crossflow of information to the intelligence, MM, and COMCAM Manpower and Equipment Force Packaging System (MEFPAK) managers.

8.11. Software for Capture/Transmission of WSV Imagery. See paragraph 5. Because of rapidly changing software technology, HQ USAF/SCMOM coordinates standards with the Intelligence, MM, and COMCAM MEFPAK managers, and keeps them current.

**9. Capture and Transmission of WSV Imagery .** The WSV team captures imagery and audio from original videotapes and transmits to the COMCAM theater imagery collection point in motion picture experts group (MPEG) format, using deployed or existing base computer networks as the transmission medium. Personnel responsible for the capture, storage, and transmission of WSV adhere to the Operational Risk Management procedures outlined in AFI 90-901, *Operational Risk Management*.

9.1. Transmission Restrictions. Due to bandwidth considerations and information security procedures at deployed locations, wing-level and theater WSV teams need access to SIPRNET. Specifically, unit-level WSV teams need to partner with local intelligence staffs, and theater-level teams require access to operations cells, intelligence facilities, or secure battle staff rooms to access SIPRNET accounts.

9.2. Other Transmission Means. Saving the file at reduced frame rates (to include still frames) and smaller screen sizes may minimize file size in order to facilitate passage through the network. When the communications infrastructure is unable to support expedient file transmission, wing WSV teams may save imagery files and supporting information to large-capacity computer storage disks (i.e., Zip Disk), compact disks, or videotapes (as available) for physical shipment. Physically ship WSV material via the most expedient means, such as intra-theater airlift or overnight mail (consistent with operational security). When WSV teams must master imagery to videotape, they rely on the local recording platform that offers the best video reproduction quality. Use analog dubs for local customers in the Vertical Helix Scan format, unless otherwise specified.



**10. WSV Program Policy .** The policy governing the WSV program in wartime or contingency operations. Peacetime operations mirror these policies as closely as possible to train as we would fight.

**11. MM and COMCAM .**

11.1. MM Policy. During full-scale contingencies, program one MM person, Air Force Specialty Code (AFSC) 3V051, to deploy under UTC 6KPWS to the squadron or wing-level. Consider this individual an intelligence asset under operational control of the Wing/Group SIO.

11.2. COMCAM Policy. During full-scale contingencies, deploy the theater WSV COMCAM team to the theater-level under UTC 6KPWV. The 6KPWV establishes a central processing team to manage WSV imagery from theater air bases. The theater WSV facility is normally deployable via airlift, staffed by COMCAM personnel, and collocated with the COMAFFOR or the JFACC and AOC to provide tacticians and analysts access to all selected WSV files. The Theater WSV COMCAM team is under the operational control of the Joint Operations Director, but works hand-in-hand with intelligence personnel.

**12. Information Collection, Records, and Forms .**

12.1. Information Collections. No information collections are created by this publication.

12.2. Records. Records pertaining to unit training video tapes (paragraph 8.1.), unit-level WSV clips (paragraph 8.8.), and theater-level WSV clips are created by this publication. Retain and dispose of these records according to AFMAN 37-139 (will convert to AFMAN 33-322, Volume 4), Table 33-17, Rules 16 or 20. Records pertaining to videotapes and digitized video clips for inclusion at the DVIC/OM-PA are created by this publication. Retain and dispose of these records according to AFMAN 37-139 (will convert to AFMAN 33-322, Volume 4), Table 10-2 (paragraph 8.2.).

12.3. Forms (Adopted and Prescribed). AF Form 847 is adopted in this publication. No forms are prescribed by this publication.

JOHN L. WOODWARD, JR., Lt General, USAF  
DCS/Communications and Information



**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

Title 5, United States Code, Section 552, *Freedom of Information Act*

DoDD 5040.4, *Joint Combat Camera (COMCAM) Program*, September 30, 1996

AFPD 33-1, *Command, Control, Communications, and Computer (C4) Systems* (will change to Communications and Information)

AFI 14-105, *Unit Intelligence Mission and Responsibilities*

AFI 31-401, *Information Security Program Management*

AFI 33-117, *Visual Information (VI) Management*

AFI 33-133, *Joint Technical Architecture-Air Force (JTA-AF)*

AFI 35-101, *Public Affairs Policies and Procedures*

AFI 90-901, *Operational Risk Management*

AFMAN 37-139, *Records Disposition Schedule* (will convert to AFMAN 33-322, Volume 4)

AFSSI 5020, *Remanence Security* (will convert to AFMAN 33-224)

***Abbreviations and Acronyms***

**AEF**—Aerospace Expeditionary Force

**AFI**—Air Force Instruction

**AFPD**—Air Force Policy Directive

**AFSC**—Air Force Specialty Code

**AFSSI**—Air Force Special Security Instruction

**AOC**—Air Operations Center

**ATO**—Air Tasking Order

**C4**—Command, Control, Communications, and Computer

**CA**—Combat Assessment

**CAF**—Combat Air Force

**CD-ROM**—Compact Disc-Read Only Memory

**COMAFFOR**—Commander Air Force Forces

**COMCAM**—Combat Camera

**CONUS**—Continental United States

**DoDD**—Department of Defense Directive

**DVIC**—Defense Visual Information Center

**FAM**—Functional Area Manager

**HQ ACC**—Headquarters Air Combat Command

**HQ AFCA**—Headquarters Air Force Communications Agency

**HQ AMC**—Headquarters Air Mobility Command

**HQ USAF**—Headquarters United States Air Force

**JCCC**—Joint Combat Camera Center

**JFACC**—Joint Force Air Component Commander

**JFC**—Joint Force Commander

**MAJCOM**—Major Command

**MEFPAK**—Manpower and Equipment Force Packaging System

**MISREP**—Mission Report

**MM**—Multimedia (also known as Visual Information)

**MPC**—Mission Planning Cell

**MPEG**—Motion Picture Experts Group

**NCA**—National Command Authorities

**NCO**—Noncommissioned Officer

**OPR**—Office of Primary Responsibility

**PA**—Public Affairs

**SIO**—Senior Intelligence Officer

**SIPRNET**—SECRET Internet Protocol Router Network

**SPINS**—Special Instructions

**US**—United States

**UTC**—Unit Type Code

**VI**—Visual Information

**WS**—Workstation

**WSV**—Weapons System Video

### ***Terms***

**Commander Air Force Forces (COMAFFOR)**—The Air Force officer designated commander of the Air Force component command assigned to a JFC at the unified, sub-unified, and joint task force-level. The COMAFFOR serves as the single air and space power commander to the JFC. In some operations the Air Force is tasked to provide a JFACC, in which case the COMAFFOR is dual-hatted as the JFACC. The COMAFFOR always has an AOC, and if he is also serving as the JFACC then it is a joint air

operations center.

**Deployed Wing WSV Team**—The team that collects, edits, duplicates, and sends the WSV imagery from flying squadrons at a theater air base. Usually these teams deploy as part of a VI support center (6KPWS).

**Joint Force Air Component Commander (JFACC)**—The JFACC derives authority from the JFC who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The JFC may designate a JFACC. The JFC assigns JFACC's responsibilities (normally those would include, but not be limited to: planning, coordinating, allocating, and tasking based on the JFC's apportionment decision). Using the JFC's guidance and authority, and in coordination with other service component commanders and other assigned or supporting commanders, the JFACC recommends to the JFC the apportionment of air sorties to various missions or geographic areas. (JP 1-02)

**Motion Picture Experts Group (MPEG)**—Pronounced "em-peg." MPEG is a standard for compressing video.

**Significant WSV Imagery**—Significance may vary based on intended audience. At the unit/wing-level, imagery showing operational engagements with targets, missile shots, battle damage, and other high interest scenes are considered significant. In general, any weapons release or armament event during a contingency operation is considered significant. Additionally, some heads up display data may disclose vital information for intelligence purposes. At the AOC/theater-level, significant imagery may consist of shots that graphically depict aerial engagements, weapons delivery, friendly fire incidents, collateral damage or any other item with the potential for public or command interest. Also, WSV may be deemed significant even if visual imagery does not show engagements, but the audio track documents the event. Training engagements are not considered significant imagery for archival purposes, but are significant for purposes of exercising the unit/wing and AOC/theater-level WSV processing teams.

**Theater WSV COMCAM Team**—Central collection and processing team for WSV derived from theater air bases. The theater WSV facility is normally deployable via airlift, staffed by COMCAM personnel, and collocated with the JFACC and AOC to provide both senior leadership and selected users access to all selected WSV files (6KPWV).

**Weapons Systems Video (WSV)**—(1) Imagery recorded by video camera systems aboard aircraft or ship that shows delivery and impact of air-to-ground, surface-to-ground, or surface-to-air ordnance and air-to-air engagements. **NOTE:** Surface-to-ground and air represent naval contribution to JFACC and Joint Task Force Battle Damage Assessment input. (2) A term used to describe the overarching program or process of capturing, clipping, digitizing, editing and transmitting Heads-Up Display or Multi-Function Display imagery. (3) A term used to refer to actual equipment used by various career fields to perform all or part of the WSV process (see [Table A1.1](#)).

**Table A1.1. WSV Equipment Information.**

EQUIPMENT NAME	ABBREVIATION	CAREER FIELD
WSV Workstation	WSV WS	Intelligence
WSV Non-Linear Editor	WSV NLE	Visual Information
WSV Server	WSV Server	Combat Camera

**WSV Monitor**—An intelligence NCO/officer or MM representative, appointed at wing-level to ensure

recording, processing, and elevating WSV to AOC/theater WSV collection points.

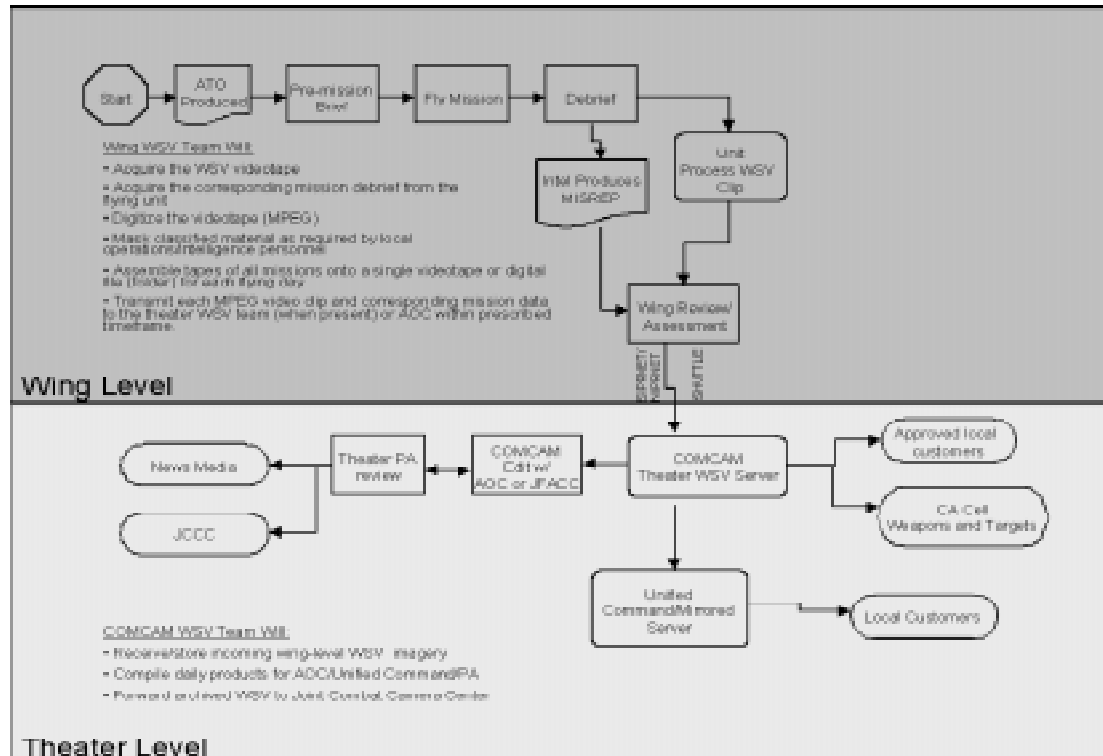
**WSV Program**—Management of WSV imagery from origination to exploitation to archiving.

## Attachment 2

## WSV PROGRAM PROCESS AND PROCEDURES

A2.1. General . **Figure A2.1.** diagrams the WSV program's process.

**Figure A2.1. WSV Program.**



## A2.2. Pre-mission Procedures .

A2.2.1. Air Operations Center or Theater. The process begins at the AOC or theater-level Combat Assessment (CA) cell targeting section. Daily air tasking orders (ATO) and special instructions (SPINS) production begins with the creation of the Target Nomination List that contains proposed targets and weaponeering data. The ATO is produced and may include directions to immediately process and exploit WSV of significant targets. Regardless if listed in the ATO or not, any sortie involving weapons release captured on the aircraft video requires sending a clip to higher headquarters.

A2.2.2. Wing. Upon receiving the daily ATO and SPINS, the wing Mission Planning Cell (MPC) executes a preliminary assessment of the capability to meet ATO tasking based upon facts such as expected weather conditions, enemy threat, aircraft range limitations, available munitions, and ability to acquire the target.

A2.2.3. Squadron. The unit-level MPC plans for WSV target priorities utilizing the daily ATO. These requirements are briefed to the aircrew as part of the unit pre-mission brief process. Members of the debriefing team and MM personnel (when present) are then notified of the WSV requirement.

### A2.3. Post-mission Procedures .

A2.3.1. Squadron-Level. Intelligence personnel (AFSC 1N0X1) or MM personnel, if available, incorporate the MISREP and WSV clip into the appropriate format for transmittal (within established theater timelines). WSV clips are then loaded to a common hard drive on the local SIPRNET and reviewed by the wing. Following this review the squadron is given approval to upload to the theater server according to theater timelines. WSV tapes are returned to the flying squadron imagery or WSV monitor for reuse or archiving, whichever is appropriate, based on the content of the videotape.

A2.3.1.1. MM personnel present. Under UTC 6KPWS, MM personnel are assigned to individual flying units during contingency operations or, in some cases, they are assigned to wing-level. When present, MM personnel are responsible for processing, cataloging, archiving, and transmitting WSV clips. They also assume responsibility for cataloging, archiving, and maintaining the original WSV tapes. **NOTE:** Intelligence or Weapons and Tactics personnel instruct MM personnel on what portion of the WSV tape to capture and clip.

A2.3.1.2. If MM personnel are not present, then unit intelligence personnel process the WSV.

A2.3.2. WSV Field Caption Sheet. Fill out a caption sheet for each WSV clip (**Table A2.1.**). It ensures efficiency and easier retrieval of a specific WSV clip. The correct completion of this sheet is a necessity.

**Table A2.1. Weapons Systems Video Field Caption Sheet Example.**

Mission Date:	Basic Encyclopedia Number:
ATO Number:	Target Name:
Mission Number:	Target Coordinates:
Unit:	Desired Mean Point of Impact:
Call Sign:	Time-over-Target:
Aircraft Type and Number:	Munitions Type and Number:
Tape Category: (see note below)	MPEG Clip File name:

A2.3.3. Editing. Electronic transmission of the entire WSV tape is impractical. The portion of the WSV tape most crucial is that segment showing weapon expenditure and impact. Provide approximately 2-5 seconds before impact and 5-10 seconds after impact or till out of field of view/information not of value. Include a window with the original tape's time code placed in an unobtrusive section so as not to obscure the target. Each WSV clip should have a 2-second plain black slate butted to the end.

A2.3.4. AOC/Theater (COMCAM WSV Server). Send the MISREP and WSV attachment to COMCAM personnel managing the theater WSV server. Approved local customers and the CA cell may access the unmasked WSV clip to perform strike analysis and other functions, while at the same time, COMCAM personnel begin the editing and masking function of those WSV clips selected by PA. Once completed, and if the theater has been designated as a release authority, the PA office may provide the masked WSV clip for public release. COMCAM sends the WSV clip in two formats, masked and unmasked, to the CONUS mirrored server (when present) for further review and validation.

A2.3.4.1. Titling. Titling information should be full screen, blue or black background, easily readable font, and should appear for no more than 2 seconds.

A2.3.4.2. Masking. Security is always a vital issue, especially when releasing WSV film to the public. Perform masking (the elimination of aircraft performance/operational parameters and/or classified information) of all WSV before release outside DoD channels. The lowest level of public release is generally accomplished at the AOC or theater-level. It is important to transmit classified WSV via SIPRNET. Under the conditions of Title 5, United States Code, Section 552, *Freedom of Information Act*, the placement and general length of reductions must be clearly visible to the viewers while still rendering classified data unreadable. Do not mask with a dark square. **NOTE:** Classification guides are theater specific in most cases. Check the theater classification guide for clarification of mission data and classification of information shown on the WSV clip. For example: Always classify BE numbers, but do not classify other information, such as aircraft headings, latitudes/longitudes, etc.

A2.3.5. Unified Command. The unified command intelligence director and operations director are able to access either masked or unmasked WSV clips at the WSV server in theater or from a mirrored server in CONUS (when present). Perform in-depth strike analysis and bomb damage assessment at this time. Simultaneously, the unified command deputy commander in chief and the PA office are able to access both masked and unmasked WSV clips. The command releasing authority may authorize the release of the masked WSV clips by PA for public release. The unified command PA implements public clearance procedures and authorizes COMCAM to send masked and cleared WSV clips via Nonsecure Internet Protocol Routing Network to the JCCC where the video is rendered into usable video formats, cataloged, and then released to various defense agencies for further use.

A2.3.6. DoD Users. The JCCC is a centralized, still photographic and video processing facility for COMCAM imagery, including WSV. The JCCC maintains the WSV clips for a period of twelve months, at which time, they migrate them to DVIC/OM-PA, the official records center for the storage and preservation of MM records of the US military. The DVIC maintains the WSV until they determine when to send it to the National Archives and Record Administration for historical purposes.

**A2.4.** Estimated Processing and Procedural Time. In order to accomplish this task, an individual must take into account a multitude of variables. Below is an outline of the most significant variables. Times listed are estimates based on theater-level inputs.

A2.4.1. WSV Clip Processing. Prime factors influencing this function include the following:

A2.4.1.1. Identification/Verification of Target. Identifying the location of the portion of the video to capture may or may not be a lengthy process. Verifying that the intended target was struck can depend heavily on whether easily identified structures/terrain are present preceding the actual detonation frame.

A2.4.1.2. Expertise/Experience of Personnel. Expectations of expertise/experience for digitizing video clips are not the same for unit intelligence personnel as for VI personnel. Unit intelligence personnel are proficient enough to process a small amount of video clips on a daily basis utilizing the WSV WS. VI personnel are expected to be proficient/experienced enough to handle the large influx of WSV clips expected during a large-scale contingency. Depending on the expertise/experience of intelligence personnel, an average, estimated processing time can range from 10-15 minutes per clip.

A2.4.1.3. Number of Personnel Assigned. Traditionally, an air-to-ground squadron has only one or two intelligence personnel assigned. These individuals perform a myriad of functions. The



additional responsibility for processing video clips for each combat mission imposes a significant increase in this workload. It is expected that with the integration of VI personnel into this process, unit intelligence personnel will benefit greatly from this assistance and significantly reduce WSV clip processing time.

A2.4.1.4. Software/Hardware. The WSV WS was fielded in order to provide a means for unit intelligence personnel to process WSV clips on a daily basis. During a full-scale contingency, VI personnel deploy to the squadron or wing with the WSV NLE. The WSV NLE is designed to handle a large volume of WSV clips in a short amount of time. It has a near real time capturing and encoding capability; a clip is produced as quickly as the video plays through the machine. The VI personnel may also operate the WSV WS, but at no time will intelligence personnel operate the WSV NLE.

A2.4.1.4.1. Estimated time for processing clips utilizing the WSV WS: 5-15 minutes.

A2.4.1.4.2. Estimated time for processing clips utilizing the WSV NLE: Near real time; seconds to generally less than 15 minutes.

A2.4.1.5. WSV Clip Headers. Attach a header file to each WSV clip for identification purposes. Headers should contain the information listed on the Pilot Caption Sheet. Utilizing a standardized header file and importing that file into the video clip should only add 1-5 minutes of processing time.

A2.4.1.6. MISREPS. The theater dictates the time requirements for creation and dissemination of MISREPs. Times generally range from 45 minutes after engine shutdown to 2 hours. The WSV clip may or may not accompany the MISREP to higher headquarters. **NOTE:** In order for higher headquarters to perform comprehensive combat assessment, the MISREP and the WSV clip must be together and the theater must provide a means for accessing them at the same time.

A2.4.1.7. VI Personnel Present. When VI personnel are present, the ultimate goal is for them to digitize the WSV clip while intelligence personnel prepare the MISREP. This procedure enables the WSV clip to accompany the MISREP to higher headquarters, and in most cases eliminates significant time factors involved. (See [A2.4.1.6](#)).

A2.4.1.8. VI Personnel Not Present. When VI personnel are not present, intelligence personnel are primarily responsible for the preparing and disseminating the MISREP to higher headquarters. Creating the MISREP takes precedence over digitizing the WSV clip. In some instances you may delay the processing of the WSV clip since MISREPs have time limits associated with them (up to 2 hours). This is a major factor in estimating time requirements for processing and sending clips to higher headquarters. The WSV may not always be a secondary priority. The WSV line remarks in the ATO may drive it to an equal or higher priority. The ultimate goal is to send the MISREP and WSV sent at the same time.

A2.4.1.9. Transmission time. This function can occur almost instantaneously or require hours for completion. Prime factors influencing transmission time are: the size of the file, the communications capacity of the transmission lines, and how busy the communications lines are at the moment of transmission. Methods for transmission of WSV clips are discussed below.

A2.4.1.9.1. E-mail Transmission. Actual time can range from 1 minute to hours. Average estimated time is 1 to 15 minutes on a local network. The average estimated time for non-local network transmissions is generally 15+ minutes. Typically, e-mail transmission can be the

slowest method of transmission because a message is sent from a machine to an e-mail server where the server determines where to send the message to next, and then the message is routed to the actual end destination machine. This can also be the slowest method because so many individuals are using e-mail that the amount of information being transmitted far exceeds communication systems capabilities.

A2.4.1.9.2. FTP. Actual time can range from 1 minute to hours. Estimated time: 1 minute to 15 minutes. Generally quicker than e-mailing because when utilizing the FTP method a message goes directly from one server to the end destination machine. In addition, the normal limitation on attachment file size common on e-mail servers (2 megabytes) is not a factor when using FTP.

A2.4.1.9.3. Shared Network. Actual time approximately 1 minute. Average estimated time is 1 minute. "Dragging and Dropping" is the fastest and most convenient method for transferring WSV clips and MISREPs. Units with connectivity to their wings and wings with connectivity to the theater AOC, for example, may utilize their shared drives as the prime method of transferring WSV clips to higher headquarters. Simply select the desired file, drag and drop it into to the appropriate folder. The ability to "Drag and Drop" is not only quick, but utilizes consistent, local network architecture.

A2.4.1.9.4. PA Release Considerations. The entire process, from engine shutdown to release to the media, is currently estimated at 4-6 hours. (See paragraph 5.3.).

A2.4.1.9.5. Masking. Intelligence personnel at the unit/wing-level are not required to mask WSV clips. Masking is to be accomplished primarily at the AOC/theater-level by COMCAM personnel. In some cases, VI personnel may be tasked by the AOC/theater to mask a specific WSV clip. Due to the expertise and high-tech capability of their equipment, VI and COMCAM personnel, masking WSV clips should only take a few minutes to accomplish. Estimated time: 1-5 minutes.

A2.4.1.10. Media Release Approval. Based on current practices/procedures, this process can take minutes to several hours. Air Force does not have established procedures for PA to access WSV clips the same way, every time, or even from the same location. Under the proposed architecture, PA can obtain video clips from the same place consistently while following the same procedures each time. In addition to decreasing the amount of time for PA to access WSV clips for public release purposes, standardizing this process at the AOC/theater-level should aid in preventing inadvertent security lapses. Estimated media release time under proposed architecture plans: 60 minutes or less. (See paragraph 5.3.).